Professional and Managerial Branch
Engineering Group
Engineering Associate Series

ELECTRICAL ENGINEER ASSOCIATE I*

09/89

CHARACTERISTICS OF THE CLASS:

Under general supervision, performs a variety of electrical engineering duties; performs related duties as required.

EXAMPLES OF DUTIES:

Designs electrical equipment and prepares specifications to obtain the most efficient utilization of energy; designs and develops solid state digital control and monitoring equipment; prepares electronic designs, schematics, assembly diagrams, wire lists and wiring diagrams; builds, tests and de-bugs prototype units; selects and procures components used to construction electrical equipment; supervises construction, installation and start-up of electrical equipment.

Trains personnel in the operation and maintenance of electrical equipment; analyzes and solves problems and supervises the installation and implementation of solutions; performs field inspections of construction in progress and completed projects; recommends procedures for efficient operation of electrical equipment; acts as liaison with local utility companies for the installation and rates of gas and electrical service; may supervise technical employees; enforces safe working practices and procedures; explains plans and designs to the public.

Review plans for proposed electrical components and assemblies prepared and designed by private consultants; inspects contract projects; interprets plans and specifications of work being done under contract; supervises and is responsible for the inspection of construction projects; coordinates plans for construction projects with utilities; coordinates design and construction work within the department; performs special engineering studies; appraises shortages, excesses, quality, and costs of existing facilities.

MINIMUM QUALIFICATIONS:

Training and Experience: Graduation from an accredited college or university with a Bachelor's Degree in Electrical Engineering.

Knowledge, Abilities and Skills: Some knowledge of the principles and practices of electrical engineering; some knowledge of the methods, materials, tools, and equipment used in electrical construction; some knowledge of cost determination techniques; some knowledge of federal, state and local laws, codes and ordinances as they pertain to electrical engineering; some knowledge of safe working practices and procedures; some knowledge of the use of computer-aided drafting and design (CADD) systems.

Ability to prepare designs, plans and specifications; ability to express oneself clearly and concisely, both orally and in writing; ability to establish and maintain effective working relationships with fellow employees and the general public.

Physical Requirements: Mobility within an office, field and construction site environment; operate a motor vehicle through City traffic.

Special Requirements: Subject to on-call during non-working hours and mandatory overtime during periods of Public Works Emergency Operations.

Licenses and Certificates: Texas Class "C" Drivers License or equivalent license issued by another state.

* The Title of Electrical Engineer I can be used provided registration as a professional engineer in the State of Texas has been obtained.

Director of Personnel

Department Head